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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,932	03/31/2006	Hiroyuki Kono	2481-0112PUS1	3103
2292 7590 10/29/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER MC'CARRY JR, ROBERT J				
ART UNIT 3617		PAPER NUMBER		
NOTIFICATION DATE 10/29/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/532,932

Applicant(s)

KONO ET AL.

Examiner

ROBERT J. MCCARRY JR

Art Unit

3617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-28 is/are allowed.
- 6) ☒ Claim(s) 1-8, 19, 29-31 is/are rejected.
- 7) ☐ Claim(s) 9-18 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites "A rail vehicel guided along a running route without contact with a guide rail;" It is unclear as to how a rail vehicle an be guided without a rail. Later dependent claims recite; "The vehicle guided along " running route without contact with a guude rail." This leaves the claims vague and indefinite and the dependent claims are contradictory to the independent claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sadano et al (US 6,463,369).

Sadano et al discloses a steering system for a vehicle. The vehicle is comprised of wheels mounted to a frame, which the Examiner has interpreted as a cart, and a body supported on the frame and the wheels. The vehicle is further comprised of a

steering control system which is comprised of a control unit 10 connected to a camera controller 26. The camera controller operates a forward facing camera 25. The camera observes the roadway in which the vehicle travels and aids in the controller choosing a target steering angle. The camera and the plurality of control units are able to determine a target steering angle as well as an actual steering angle based on the speed and acceleration of the vehicle as calculated by the vehicle speed sensor 22 and the longitudinal acceleration sensor 23, both of which are in direct communication with the central control unit 10. A steering angle sensor 21 is also directly connected to the control unit 10 and mounted to the steering shaft to determine the steering angle. The control unit is also able to calculate the yaw of the vehicle and pass this to the steering motor to allow for the actual steering angle by reducing or increasing the torque of the motor. By adjusting the torque of the motor from the target angle to the actual angle will allow the system to lessen any vibrations accompanied by quick and abrupt movements of the system. The steering assembly controlled by the control unit 10 and motor 16 is further comprised of a drive gear 15 and a drive gear 14 mounted on the steering shaft 5. The gears are controlled by a clutch 17 with the clutch being controlled by the motor 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadano et al (US 6,463,369).

Sadano et al discloses the steering system as described above. It would have been obvious to one of ordinary skill in the art to have come to the expected result that since Sadano et al discloses the same apparatus, that it would be operated by the same method.

Allowable Subject Matter

Claims 25-28 are allowed.

Claims 9-18 and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed July 11, 2008 have been fully considered but they are not persuasive. Applicant argues that the prior art of Sadano et al does not disclose the steps of generating a current steering angle or a deviation based on the current position of the vehicle. Steps 1 and 2 depicted in figure 2 of the prior art show calculations by the vehicle control system for reading a steering angle and a deviation. This would be based on the current position or travel of the vehicle. The following step shows the calculation of a target steering angle based on the position of the vehicle and the information provided in the previous step.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ROBERT J. MCCARRY JR** whose telephone number is (571)272-6683. The examiner can normally be reached on Monday through Friday 7:00am to 3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Joseph Morano/
Supervisory Patent Examiner, Art Unit 3617

/R. J. McCarry Jr./
Examiner
Art Unit 3617

RJM
October 23, 2008